

IN THE CLAIMS:

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (previously presented) A cell creation method of control line signals for an ATM network comprising a plurality of multiplexing equipments realizing communication among information terminals, comprising the steps of:

creating cells from user data to be transmitted from one of said information terminals to another one of information terminals and control line information input from said one information terminal at a multiplex equipment connected to said information terminals, said control line information indicating a control line signal including a Receive Data/Carrier Detect (RS/CD) signal being necessary for said another information terminal to receive said user data through half-duplex communication, and

transmitting said cells including said user data and said control line information to said another information terminal.

2. (previously presented) A cell creation method of control line signals in accordance with claim 1, wherein a portion of a cell payload to be transmitted is mapped for transmitting said control line signals when creating said cell from said control line information, and

said control line information is multiplexed into said cell at the transmission side and separated from said cell at reception side.

3. (currently amended) A cell creation method of control line signals for an ATM network comprising a plurality of multiplexing equipments realizing communication among information terminals, comprising the steps of:

creating cells from user data to be transmitted between a pair of the communicating information terminals and control line signals indicating control line information relating the transmission of said user data at said multiplexing equipment connected to said pair of the communicating information terminals respectively; and

transmitting said cells including said user data and said control line information between said pair of the communicating information terminals,

wherein a portion of a cell payload to be transmitted is mapped for transmitting said control line signals when creating said cell from said control line information,

wherein said control line information is multiplexed into said cell at the transmission side and separated from said cell at reception side, and

wherein a Receive Data/Carrier Detect (RS/CD) signal of said control line signals is extended for a predetermined period before said RS/CD signal is multiplexed.

4. (previously presented) A cell creation method of control line signals in accordance with claim 1, wherein said multiplexing equipment connected to said pair of the communicating information terminals has two operating modes which can be selected, one being a control line signal transmission mode for transmitting said control line information, the other being a constant fix mode for executing a full duplex communication.

5. (previously presented) A multiplexing equipment, being one of a plurality of multiplexing equipment included in an ATM network for realizing communication between information terminals, connected to a pair of the one of the communicating information terminals, comprising:

multiplexing means for creating cells from user data to be transmitted from one of said information terminals to another one of information terminals and control line information input from said one information terminal, said control line information indicating a control line signal including a Receive Data/Carrier Detect(RS/CD) signal being necessary for said another information terminal to receive said user data through half-duplex communication, and

means for transmitting said cells including said user data and said control line information to said another information terminal at reception side.

Claims 6-8 (canceled).

9. (previously presented) A cell creation method of control line signals in accordance with claim 31, wherein said RS/CD signal is extended for a predetermined period before data of said RS/CD signal is multiplexed.

Claim 10 (canceled).

11. (previously presented) A multiplexing equipment, being one of a plurality of multiplexing equipment included in an A TM network for realizing

communication between information terminals, connected to a pair of the communicating information terminals, comprising:

multiplexing means which creates cells from user data output from one of said pair of information terminals and control line information input from said one information terminal said control line information indicating a control line signal including a Receive Data/Carrier Detect (RS/CD) signal being necessary for said another information terminal to receive said user data through half duplex communication, and

separation means separating said control line information and said user data from said cells transmitted via said ATM network and outputting said separated control line information and the user data to one of said information terminal reception side.

Claim 12 (canceled).

13. (previously presented) A multiplexing equipment according to claim 11, wherein said multiplexing means maps a portion of a cell payload to be transmitted for transmitting said control line signals when creating said cell from said control line information.

14. (previously presented) A multiplexing equipment according to claim 11, wherein said multiplexing means comprising:

extending means for extending said RS/CD signal for a predetermined period before data of said RS/CD signal is multiplexed.

15. (previously presented) A multiplexing equipment according to claim 11, comprising:

two operating modes which can be selected, one being a control line signal transmission mode for transmitting said control line signals by creating said cell from said control line information, the other being a constant fix mode for executing a full duplex communication.